

CLAIMS

- 1 1. An apparatus for controlling the removal of moisture from seed cotton in a
2 cotton gin including a seed cotton dryer stage, the seed cotton leaving the seed cotton
3 dryer stage having a desired moisture content; said apparatus comprising:
 - 4 (a) rate measuring means for measuring the rate of seed cotton entering the seed
5 cotton dryer stage;
 - 6 (b) moisture content measuring means for measuring the moisture content of the
7 seed cotton entering the seed cotton dryer stage; and
 - 8 (c) seed cotton dryer stage control means for causing the seed cotton dryer stage
9 to remove an amount of moisture from the seed cotton based on the desired moisture
10 content of the seed cotton leaving the seed cotton dryer stage, the moisture content of
11 the seed cotton entering the seed cotton dryer stage, and the rate of seed cotton
12 entering the seed cotton dryer stage.
- 1 2. The apparatus of claim 1 which said moisture content measuring means
2 includes a radio frequency sensor.
- 1 3. The apparatus of claim 1 in which said seed cotton dryer stage is gas operated;
2 in which said seed cotton dryer stage control means includes a gas control valve for
3 controlling the flow of gas to said gas operated seed cotton dryer stage and a gas flow
4 meter for measuring the flow of gas to said gas control valve.
- 1 4. A method for controlling the removal of moisture from seed cotton in a cotton

2 gin, the cotton gin including a seed cotton dryer stage, the seed cotton having a desired
3 moisture level ; said method comprising:

4 (a) measuring the rate of seed cotton entering the seed cotton dryer stage;

5 (b) measuring the moisture content of the seed cotton entering the seed cotton
6 dryer stage; and

7 (c) controlling the seed cotton dryer stage to remove an amount of moisture from
8 the seed cotton in the seed cotton dryer stage based on the desired moisture content of
9 the seed cotton leaving the seed cotton dryer stage, the moisture content of the seed
10 cotton entering the seed cotton dryer stage, and the rate of seed cotton entering the
11 seed cotton dryer stage.

1 5. A method for removing moisture from seed cotton in a cotton gin; the seed
2 cotton having a desired moisture content; the cotton gin including a seed cotton feeder,
3 a gas operated seed cotton dryer stage; said method comprising:

4 (a) measuring the moisture content of the seed cotton entering the seed cotton
5 dryer stage;

6 (b) measuring the rate of seed cotton entering the seed cotton dryer stage; and

7 (c) controlling the amount of gas fed to the seed cotton dryer stage to remove an
8 amount of moisture from the seed cotton based on the desired moisture content of the
9 seed cotton, the moisture content of the seed cotton entering the seed cotton dryer
10 stage, and the rate of seed cotton entering the seed cotton dryer stage.

1 6. The method of claim 5 in which said step of controlling the amount of gas fed
2 to the seed cotton dryer stage includes the step of measuring the flow of gas to the seed

3 cotton dryer stage.

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